

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

### **Listing of Claims:**

1. (Currently amended) A measuring device, comprising:

an elongated first electrode having a longitudinal axis for insertion into a material to be measured; [[and]]

a housing which at least partially surrounds the first electrode, wherein the first electrode is movable in relation to the housing in the axial direction of the longitudinal axis;

a receptacle device that accommodates an end of the first electrode, wherein the housing has a base plate on a side of the receptacle device and the receptacle device is part of the base plate, and wherein the base plate is made of an elastic material; and

a chamber which is enclosed by the housing and is tightly sealed with respect to the outside, wherein the base plate tightly seals a lower area of the chamber.

2. (Cancelled)

3. (Currently amended) The measuring device as recited in Claim [[2]] 1, wherein the

receptacle device is made of an elastic material which yields in the axial direction with a movement of the first electrode.

4. (Currently amended) The measuring device as recited in Claim ~~[[2]]~~ 1, wherein the receptacle device has a damping element or is connected to a damping element which yields in the axial direction with a movement of the first electrode and thereby exerts a force directed in the opposite direction on the end of the first electrode.
5. (Previously presented) The measuring device as recited in Claim 4, wherein the damping element is designed as a rubber buffer.
6. (Currently amended) The measuring device as recited in Claim 4, ~~characterized in that~~ wherein the damping element is designed as a spring.
7. (Cancelled)
8. (Cancelled)
9. (Currently amended) The measuring device as recited in Claim ~~[[7]]~~ 1, wherein the base plate is designed like a diaphragm and has folded sections.
10. (Currently amended) The measuring device as recited in Claim ~~[[2]]~~ 1, ~~characterized in that~~ wherein the receptacle device has a recess for form-fittingly receiving one end of the first electrode.

11. (Previously presented) The measuring device as recited in Claim 10, further comprising a sealing device through which the one end of the first electrode is in tight contact with the recess.
12. (Previously presented) The measuring device as recited in Claim 1, wherein the first electrode is glued or welded to the housing or is encased.
13. (Currently amended) The measuring device as recited in Claim 1, wherein contact rods are provided and at least one of which is connected to the first electrode and which protrude through a base plate and are bent on a bottom side of the base plate so that the bent ends of these contact rods are threaded into eyes provided ~~specifically for this purpose~~ on the bottom side of the base plate.
14. (Currently amended) The measuring device as recited in Claim 1, further comprising a ~~chamber which is enclosed by the housing and is tight with respect to the outside; and at~~ least one second electrode provided between the first electrode and a casing[[,]] ~~and a base plate tightly seals a lower area of the chamber.~~
15. (Currently amended) The measuring device as recited in Claim 14, wherein a polymer protolyte liquid is added to the chamber, surrounding at least one of: the first and/or and second electrodes.

16. (Previously presented) The measuring device as recited in Claim 1, wherein the first electrode is situated in a tube to which an electrolyte liquid is added.
17. (Previously presented) The measuring device as recited in Claim 16, wherein the tube is displaceable in the axial direction toward the first electrode.
18. (Previously presented) The measuring device as recited in Claim 1, wherein the housing is displaceably situated on a measuring tip with respect to the first electrode.
19. (Previously presented) The measuring device as recited in Claim 1, wherein a diameter of the housing decreases in the direction of a measuring tip of the first electrode.
20. (Currently amended) The measuring device as recited in Claim 1, wherein at least one of:  
the first electrode ~~and/or~~ and a protective sleeve surrounding ~~[[it]]~~ the first electrode is made at least partially of glass.
21. (Previously presented) The measuring device as recited in Claim 1, wherein the first electrode is pivotably mounted.
22. (Previously presented) The measuring device as recited in Claim 21, wherein the first electrode has pivoting means via which the first electrode is pivotable away from the axial direction in the case of a force component perpendicular to the axial direction.

23. (Previously presented) The measuring device as recited in Claim 1, wherein the housing contains at least in part a SAN or ABS material.

24. (Currently amended) A portable pH meter having a modular replaceable pH measuring device, wherein said measuring device includes:

an elongated first electrode having a longitudinal axis for insertion into a material to be measured; [[and]]

a housing which at least partially surrounds the first electrode, wherein the first electrode is movable in relation to the housing in the axial direction of [[its]] the longitudinal axis;

a receptacle device that accommodates an end of the first electrode,  
wherein the housing has a base plate on a side of the receptacle device and the receptacle device is part of the base plate, and wherein the base plate is made of an elastic material;  
and

a chamber which is enclosed by the housing and is tightly sealed with  
respect to the outside, wherein the base plate tightly seals a lower area of the chamber.

25. (Currently amended) The pH meter as recited in Claim 24, further comprising a display and a keyboard situated in said housing and a circuit board from which spring contacts lead away to contacts of the first electrode and a second electrode, the contacts being situated on a bottom side of [[the]] a base plate.

26. (Previously presented) A method for manufacturing a measuring device comprising:

- (a) encasing electrically conducting contact rods to form a base plate out of which protrude the contact rods for at least one of a first and a second electrode;
- (b) adding an electrode liquid to a tube;
- (c) inserting the first electrode into the tube and gluing the tube to the base plate;
- (d) welding the base plate to an empty casing to form a housing which has a chamber;
- (e) adding a polymer protolyte liquid of the second electrode into the chamber.

27. (Previously presented) The method as recited in Claim 26, wherein the contact rods protruding out of the housing are bent over to form contacts on the outside wall of the housing.

28. (Cancelled)

29. (Currently amended) The measuring device as recited Claim 1, further comprising:

at least one second electrode disposed between the first electrode and housing;

and

contact rods connected to the first and second electrodes and which protrude through ~~[[a]]~~ the base plate and are bent on a bottom side of the base plate so that the bent ends of the contact rods are threaded into eyes provided ~~specifically for this purpose~~ on the bottom side of the base plate.

30. (Previously presented) A method for measuring pH, comprising:

inserting a measuring device into a material to be measured, wherein said measuring device includes:

an elongated first electrode having a longitudinal axis for insertion into a material to be measured; and

a housing which at least partially surrounds the first electrode, wherein the first electrode is movable in the axial direction of its longitudinal axis, and wherein said first electrode is surrounded by a polymer protolyte material.

31. (New) The method of claim 30, wherein the first electrode is movable with respect to the housing in the axial direction of the longitudinal axis, and wherein the measuring device further includes:

a receptacle device that accommodates one end of the first electrode, wherein the housing has a base plate on a side of the receptacle device and the receptacle device is part of the base plate, and wherein the base plate is made of an elastic material; and

a chamber which is enclosed by the housing and is tightly sealed with respect to the outside, wherein the base plate tightly seals a lower area of the chamber.